98

TITUSVILLE AMATEUR RADIO CLUB NEWSLETTER

MARCH, 1998

OFFICERS

PRESIDENT: Bud Hughes K4CWG 269-0779 SECRETARY: Nancy Marsden KD4ITX 268-3990
V. PRESIDENT: Pike Abell W4EPU 269-4208 TREASURER: Clyde Lee K4EOS 267-9375

CLUB INFORMATION

TARC MEETINGS :	**Monthly on 4th Tuesday at 1900 hrs at Jaycee Building.**
TARC NETS:	**VIP - Thursdays at 1000 hrs on 146.910**
	FRIENDSHIP - Thursdays at 1830 hrs. ao146.910
	MOSQUITO - Wednesdays at 1900 hrs on 28.333
TARC REPEATERS:	**VHF - 146.910 and146.970. UHF 444.150**

PRESIDENT'S CORNER

By Bud Hughes K4CWG

Be sure and mark your calendar for March 13, 14 and 15. These are the dates for the 21st Air Show to be held at Space Coast Regional Airport, Titusville, FL. Tickets are adults: $10 ($8 advance). Children 4 to 12: $6 ($4 advance). Children under 4: free. The cost of flight line (pit) is $3.00. A 3 day pass (includes flight line pass) is $25. For ticket information call Valiant Air Commant at 268-1941. If you would like to help in providing communications for the show, please contact Ralph Hall at 267-9418. I plan to be there and hope to see you at the show.

>Included on the agenda for the next club meeting on 3/24/98 will be the election of a board member to fill the office vacated by Bob, W4VQB, who resigned his post at the February 24 meeting. His resignation is truly a loss to the club, but Bob has assured me that he will continue to support the club.

>If you have not joined us for the Thursday evening meal, let me extend a special invitation to be with us. We are currently meeting at Jalopy's restaurant. I know you and your family will enjoy the company. It's always nice to visit with friends and this is a great way of doing so.

>In accordance with the club's by-laws, Article 5, Section 4, the audit of TARC's financial records has been completed. The appointed Audit Committee includes Chairman Ralph Hall, AE4LE and members Cliff Hoag, KC4SYD and Clarence Bauer, KC4BY have concluded the audit and have submitted their findings to the club President. The audit and committee report will, by request, be made available for club member viewing at our March club meeting. Any one desiring to view this report please contact Nancy, KE4ITX, TARC secretary.

>The club is currently without a Field Day Chairperson. Anyone who would like to chair this event, please contact Pike, W4EPU or Bud, K4CWG. (See page 2)

HAPPY BIRTHDAY

MARCH BIRTHDAYS

MAR 3 KU4JL GARY COMER
MAR 6 KD4DOJ FAYE SKIDMORE
MAR 8 WB4LOE LARRY SKIDMORE
MAR 12 KF4BKY JOE HUSSON
MAR 15 KA4LTK LLOYD MULLINS
MAR 17 KK4EY LEE ROLL
MAR 19 W4UYZ JIM CREEVAY
MAR 19 AB4P BILL MALLMAN
MAR 19 KS4YH JOHN TOWERS
MAR 20 KD4EYR JUNE ROLL
MAR 23 KA3CFG JOSEF GOEBEL
MAR 23 WB4PXO JIM MORGAN
MAR 23 AC4KU AL SANFORD
MAR 24 KD4JMX STEPHANIE PHILLIPS
MAR 24 KE4YQB MIKE PALM
MAR 27 AE4OJ DAVID GREENWALD
MAR 28 KE4AGK MAURICE GIONET
MAR 30 KC4TE GENE MANN
MAR 30 KC8CIX ROGER McCLELLAND
MAR 31 KD4ITX NANCY MARSDEN

PRESIDENT...from page 1

If this year's Field Day is like all previous ones, there will be plenty of help. Due to the efforts put forth in preparing and operating, this club has always enjoyed high ranking in the point scoring. However, even though we are proud of our high point scoring, the rewarding part of Field Day is the ability to associate with fellow members. The Field Day site will be the same as last year - namely Fox Lake Park.

>We were happy to have Joe, N1PAW and Bert, N1OGE to attend several club functions while they were here on vacation from Auburn, MA. By the way, Joe upgraded to General and Bert passed the General theory and is working on the 13 WPM Morse code. Joe and Bert have a wonderful trip scheduled before going back to New England. Joe and Bert have been members for 5 years. We all wish them the best on their planned travels before returning to Auburn.

Hope to see you at the March meeting.

TARC MOURNS
THE PASSING OF MEMBER
STEVE GRINER, KS4YU.
OUR CONDOLANCES
TO THE FAMILY

UNPLUG IT, DUMMY!
SAFETY FOR THE TRAVELING HAM
From 73 Magazine Jan.1981

For those recreational vehicles which have provisions for connecting to 110 volt outside power, there is always the risk of the owner forgetting to unplug the power cord before driving off. Human frailty and Murphy's Law being what they are, this is bound to happen sooner or later.

>For us, the reckoning came one time when we had our camper van parked in our driveway while we were packing for a trip. We had the cord pluged into our house power for precooling the refrigerator. Getting off later than we had hoped, we took off in a hurry. When we got to our first stop, we were horrified to find the socket from our extension cord sitting in the van power receptical. The cord had pulled right out of its socket when we

drove off, meaning it was lying in our driveway with the live ends exposed. Mindful of the neighborhood children who frequently play in our driveway, we put in a frantic long distance call to our local police, informing them of the situation and asking them to do something about the hazard. Fortunately, no further harm came of it.

To preclude any repetition of this fiasco, I installed a cord alarm in our van. It is arranged so that a door bell rings if the ignition is turned on while the cord is plugged in. You can install such an alarm in your RV for an expenditure of about $15 for parts - less than the cost of a power cord that might be ruined by a drive-off. It does the same job as a commercial alarm that sells for $50.

You will need the following three items: 1) An ordinary door bell, installed near the driver's seat. I chose a door bell rather than a buzzer in order to have a distinctive alarm sound that would not be confused with the seat belt warning buzzer. 2) A bell transformer of the type designed to mount in a knock-out hole in a junction box. Be sure to get a 10 volt transformer rather than a 16 volt type, which is for chimes. 3) a 12 volt dc relay (Radio Shack #275-208 or equivalent).

Attach the bell transformer to an unused knockout hole in the power control center or the junction box for the outside power receptical. (Confinement of the 110 volt wiring to the inside of such a box makes for a very safe installation.) Connect the primary wires to the 110 volt power at the point where it enters the vehicle, with no circuit breakers or other switching devices intervening so that the alarm will not fail to operate because of a breaker or switch being turned off. (Protection against short circuits in the transformer is given by the circuit breaker feeding the outlet into which the cord is plugged).

Make a bracket for the relay socket out of sheet metal or aluminum angle and mount the relay in a convenient location. Wire up the system as shown in Fig. 1, soldering all connections to the relay socket. The transformer is connected to the bell in series with a pair of normally-open contacts on the relay. One end of the relay coil is connected to chassis ground, and the other end is connected to a circuit that is energized when the ignition is turned on. Pick a circuit that is energized only in the "Ignition" position. For our Econoline van, a convenient connection point was the wire feeding power to the seatbelt warning system.

With these connections, turning on the ignition operates the relay and completes the circuit from the transformer to the bell so that it will ring if the transformer is powered by the cord being plugged in.

What if you remember to unplug the cord but forget to stow it? This alarm is foolproof but it is not claimed to be damn-foolproof!

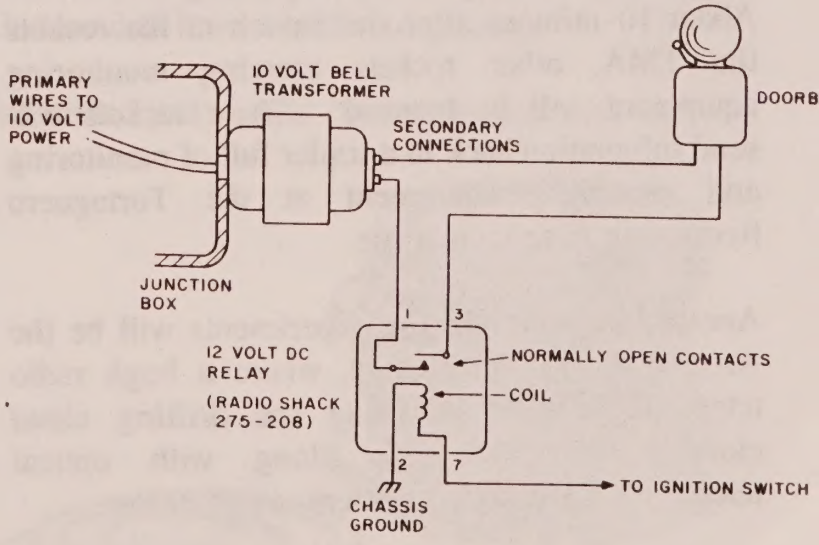


Fig. 1. Wiring diagram of the cord alarm.

PUERTO RICO HAS KEY ROLE IN SKY TESTS

By Lance Oliver, Sentinel correspondent

VEGA BAJA, Puerto Rico--------
The purpose of the Coqui II project is to study turbulence in the E-layer of the ionosphere, which is used by every ham radio operator who ever bounced a signal around the curvature of the Earth.

The purpose of the study is to improve the ability of satellites to transmit through this electrically charged layer of the ionosphere. The practical payoff, said Coqui II project scientist Miguel Folkmar Larsen, will be satellites that can carry more compressed signals - and therefore, more data - instead of having to put more satellites into orbit.

To improve satellites' ability to transmit through the E-layer, scientists have to understand it better. To study it, the Coqui II rockets will carry a chemical called trimethylaluminum, or TMA, to be released into the ionosphere. The combustible TMA will burn slowly in the oxygen-poor area between the atmosphere and space, forming a milky white cloud that should be visible for hundreds of miles for up to 20 minutes.

About 10 minutes after the launch of the rockets the TMA, other rockets carrying monitoring equipment will be launced. These rockets will send infomation back to a trailer full of monitoring and recording equipment at the Tortuguero Recreation Area launch site.

Another key actor in the experiments will be the Arecibo Radio Observatory, where a hugh radio telescope will be watching the drifting cloud closely, gathering data along with optical telescopes and other equipment.

The observatory is the real reason Coqui II is being done in Puerto Rico, Larsen said.

"Other places have this layer, but they don't have the Arecibo Observatory," Lasrsen said.

LIGHTNING STRIKES

By Robert Birdsong, KB4A
From QST 2/98 Technical Correspondence

A recent lightning strike to my trap dipole antenna promps me to write and recommend that all amateurs recheck their antenna installations to avoid the mistakes I made.

I had just returned home from a shopping trip with my wife, her sister and a cousin. On the way home it had rained, the sky illuminated with distant lightning flashes. About 15 minutes after we got home, the storm seemed to have passed. I decided to check my e-mail, so I plugged in the computer and phone.

Suddenly, a crash of lightning struck in my backyard! I immediately disconnected the computer (too late, I discovered afterward!) and intended to wait out the the sudden reappearance of the storm. It was then that my wife's cousin asked about a noise we could all hear. I opened the basement door and recognized that the sound was that of the smoke detector alarm near the ham shack. I ran downstairs.

At the bottom of the stairs I heard the sound of running water. I turned off the main water valve and approached my shack that was now flodded. On inspection, I realized that lightning had stuck the trap dipole, hung in the trees about 75 feet from the house, and followed the buried coaxial feed line into the shack. The coax ran through a hole in the concrete block wall between the basement and a small crawl area under the utility room. The lightning had damaged a 3/8" copper gas line that fed to a gas-fired grill on my deck. The gas line was burned completely through! Fortunately, the gas supply was turned off, and no fire or explosion occurred. I was *very* lucky!

I discovered that the lightning strike had burned up both rotary switches in my antenna tuner nd destroyed the audio-output chip in my ICOM IC-745. My antenna switch was in the GROUND position. It was burned to a crisp. The final amplifier and driver stages in my 2-meter transceiver (connected to a separate antenna on the house) was damaged, too. A feedthrough capacitor in my Collins 30L-1 amplifier was shorted. (The amplifier had been plugged in, but was not turned on.) Strangely, all of the FET front-end transistors in my three transceivers were not damaged. My phone patch was destroyed, as was the modem in my computer. Fortunately, I was able to repair all the equipment myself. Later, I discovered that the electronic control unit in my new, high-efficiency gas furnace was damaged, as were two GFCI receptacles in the house.

This is the second lightning strike we've experienced. The first, in 1984, hit a down-spout and arced through the brick wall into the wall and electrical wiring for a bedroom's receptacles and started a fire. I was lucky(?). The fire triggered the fire alarm of my neighbor, Jerry, K4TIC; his security system dialed the fire department. (My wife and I were working.) The fire department came to check K4TIC's house, saw the smoke at my house and broke in to extinguish the fire. Most destruction was confned to one bedroom, with smoke damage throughout the rest of the house. No ham gear was hit. Repairs to the house amounted to about $25.000, and we had to live in a motel for about a month.

I relate these instances in the hope that others can learn by my mistakes. Don't run coax lines near water and gas lines. Have one central ground for everything. My gas and water lines are at dc ground, but to me, lightning acts like ac and RF. I am convinced that there was a return strike generated in my basement that was more powerful than the initial strike to the antenna. The balun and a connecting piece of RG-8X at the balun were vaporized. There was more damage in the basement than the antenna site. I have learned that one can't predict what lightning will do; it seems to act differently than everyday electricity.

Following the last strike, I have had lightning rods installed, with a continuous, buried loop ground. All the metal in my house is connected to this ground systen. In the past, I had unplugged my equipment only when I left on trips, but now it is plugged in only during use.

A young man once asked God how long a million years was to Him.

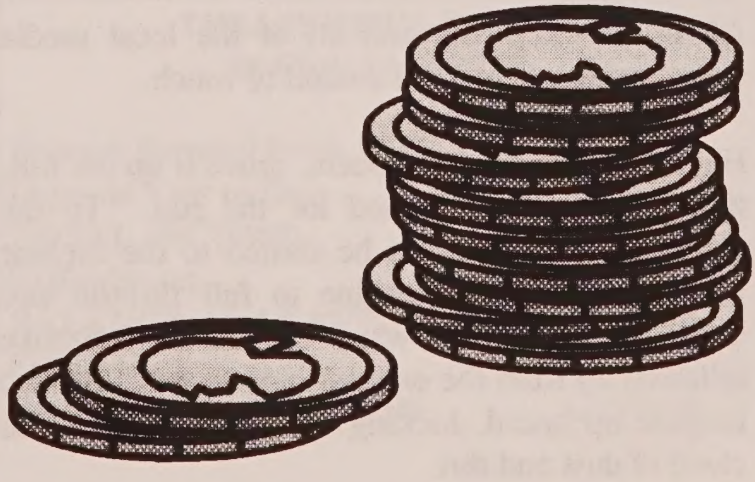
God replied, "A million years to me is just like a single second in your time."

Then the young man asked God what a million dollars was to Him.

God replied, "A million dollars to me is just like a single penny to you."

Then the young man got his courage up and asked, "God, could I have one of your pennies?"

God smiled and replied, "Certainly, just a second."



ABEL'S ANECDOTES
By Pike W4EPU

YE OL' EVEL KNIEVEL TRICK!

A farmer was watching a video tape of some old news clips showing Evel Knievel jumping over a dozen buses on a motorcycle. To the farmer, that did not seem to be all that spectacular. In fact, the farmer said, "Shucks, I could do that on my old tractor." The more he thought about it and talked it up, the more he felt like trying it himself.

It was during school vacation, and with the help of his friends on the school board, he was able to borrow twelve school busses. He lined them up side by side at the bottom of a hill on his farm.

By that time all of his neighbors were interested enough to help him prepare for the jump and watch him try it. They helped him build the appraoch and exit ramps on either side of the busses.

From the approach ramp it was a quarter of a mile incline up across the farmers pasture. It was mid summer and the pasture was grazed to the bare ground. The ground was smooth and ideal for his approach run.

By and by it was time to attempt the jump.

All of his neighbors and all of the local media representatives gathered around to watch.

He cranked up his John Deere, drove it up the hill, turned around and poised for the run. To the delight of the spectators he shifted to the highest gear, revved up the engine to full throttle and headed down hill toward the ramp. Smoke billowed up from the exhaust pipe as he continued to pick up speed, kicking up a rooster tail like cloud of dust and dirt.

He crossed over the approach ramp and became airborne, but flew only a short distance. He crashed on top of the third bus over. He totaled both the bus and the tractor, but he walked away without so much as a scratch.

As he jumped down off the bus, a reporter stuck a microphone in his face and started asking questions.

The farmer's only comment was, "I believe I would have made it, if only I had lifted the plows out of the ground."

"When they invented the first clock, how did they know what time to set it?"

FEBRUARY MEETING

By Nancy KD4ITX

The monthly meeting was called to order at 1910 by K4CWG Bud Hughes. With 59 members and guests present, all introduced themselves. Bill, W2SDB played Happy Birthday and a couple of other songs.

A motion was made, seconded and new members were voted in. Welcome to the club! KF4VRR Donald Patten; KC8CIX Roger McClelland; KE4LJ Kenneth Nadell; W3JUK Wally Newell; KB2ZLH Judy Smith; KC4ZUF Thomas Rac.

Cliff, K4SYD told about an estate sale with lots of ham equipment. The lady will let members of the club have first choice of the equipment. Cliff will take your phone number and the lady will call you to make arrangements for you to see the equipment.

W4EPU Pike announced "Run for Life" will take place March 5 at 3 p.m. It's their annual run from Homestead to St. Augustine. They raise money for homes for troubled women. Anyone wishing to help him with this event, please contact him.

Other events that are coming up and need our help is the Titusville 500 on March 21 and the Cross Florida bike rally in early May. So keep these in mind and contact him if you can help out.

Also an item of interest, if anyone wants their e-mail included in the QRT database, you can do so by accessing their database and following the instructions.

Ralph Hall, AE4LE still needs volunteers for the Valiant Air Command show to be held March 13-15. Please let him know if you can volunteer. Ralph has the paper work for anyone wishing to get their ARES badges. Just contact him.

Bob Nedimyer, W4VQB, board of directors member, turned in his resignation to Bud effective February 24. Bud accepted his resignation. The members will vote on a new board member next month.

The club needs a field day chairman. Please contact Bud if you are willing to take on this job.

The City of Titusville purchased a school bus and was going to let TARC fix it up for emergency radio communications. However, the city has been approached by someone to purchase the bus from them. The club could probably purchase the bus for $2.00. The Board of Directors met and decided the cost of insurance and upkeep of the bus would be too expensive and voted not to purchase the bus. The club members agreed to uphold the decision of the board members and not purchase the bus.

Ralph Hall, AE4LE volunteered to chair a committee to audit club financial records for 1997, and report his findings at the March meeting.

Bill, W2SDB announced his contest is still going with $20.00 to the winner. Just jot down all the advantages of Ham Radio you can think of and send them to Bill before March 5. Entries will be used in promoting ham radio in our local schools.

Meeting adjourned at 1950 hours.

TREASURER'S REPORT

By Clyde Lee, K4EOS

Balance Forward From 1997	$5356.73
Deposits Year to Date	745.00
TOTAL INCOME	**6101.73**
Expenditures	465.24
BALANCE AS AT 02/28/98	**5636.49**
FEMA Escrow	2363.75
BALANCE-CLUB FUNDS	**$3272.74**

TITUSVILLE AMATEUR RADIO CLUB
P. O. BOX 73
TITUSVILLE FL 32781-0073

MEMBERSHIP UPDATE

Total membership: 270 (2042regular, 62 family, 6 honorary)

NEW MEMBERS: KF4VHP ART HENSLEY

RENEWALS: KE4BBB CLINTON GRIFFIN
KB4BHS GLENN LEE
AE4CB DAVID HURST
KA3CJG JOSEF GOBBEL
KC4HMP BARBARA GOBBEL
W4EPU PIKE ABELL
KE4YQL CLARA ABELL
WR4FSU ROBERT STRAUGHN
WC4FSU HELEN STRAUGHN
KB4GK JOHN MUNSEY
KD4GPJ RICHARD McMILLAN
KC4HIO RICHARD SWEATT
KC4HIQ SHIRLEY SWEATT
KR4HS GEORGE SMITH
KE4LNS DON McLEAN
KF4NKL ROE WEAVER
N1PAW JOE BONARDI
N1OGE BERTHA BENARDI
KE4WJV TERRY DAMPIER
KF4AOW W.S.DAMPIER

HAMFESTS:

MAR. 1	ZEPHRYHILLS
MAR.7	ENGLEWOOD
APR.3	FANNING SPRINGS